

EPA Region 5 Records Ctr.



315285



AMERICAN STEEL AND WIRE CORPORATION

**CUYAHOGA WORKS
4300 East 49th Street
Cuyahoga Heights, OH 44125**

March, 1992

**SPILL PREVENTION, CONTROL AND COUNTERMEASURE PLAN
(SPCC PLAN)**

(40 CFR Part 112)

For the Management of Oil and Hazardous Chemicals

Particularly, as pertaining to Water Pollution Abatement



American Steel & Wire Corporation

May 20, 1992

Maureen O'Mara
United States Environmental Protection Agency
Region 5
77 West Jackson Boulevard
Chicago, Il. 60604-3590



Dear Maureen:

Referencing your letter received on May 11, 1992, I am pleased to submit our Spill Prevention, Control and Countermeasure (SPCC) Plan for the Cuyahoga Facility. As of this writing, the plan has been fully implemented.

Repling to the attention of: HSE-5J/ESS-SPCC
W2320

If you have any questions concerning this SPCC Plan, please feel free to contact me at (216) 883-3800, extension 488.

Sincerely yours,

AMERICAN STEEL & WIRE CORPORATION

Christopher M. Zielinski
Engineering/Environmental Services Technician

cc Joseph Markiw, Manager, Engineering/Environmental Services
Robert Meyer, V.P. Operations

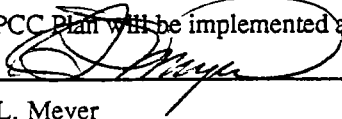
SPILL PREVENTION CONTROL & COUNTERMEASURE PLAN**GENERAL INFORMATION**

1. Name of facility American Steel & Wire Corporation, Cuyahoga Works
2. Type of facility The facility produces steel rod. Operation consist of conditioning, heating and rolling elongated square, carbon and low-lead steel billets into round rod which is coiled and banded prior to shipping. The rolling process utilizes recycled water for both contact and non-contact applications.
3. Location of facility 4300 East 49th Street, Cuyahoga Hts., Ohio 44125
4. Name and address of owner or operator:
Name American Steel & Wire Corporation
Address 4300 East 49th Street, Cuyahoga Heights, Ohio 44125
5. Designated person accountable for spill prevention at facility:

Name and title Robert L. Meyer, Vice President, Operations

MANAGEMENT APPROVAL

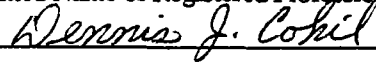
This SPCC Plan will be implemented as herein described.

Signature: 
Name: Robert L. Meyer
Title: Vice President, Operations

I hereby certify that I have examined the facility, and being familiar with the provisions of 40 CFR, Part 112, attest that this SPCC Plan has been prepared in accordance with good engineering practices.

Dennis J. Cohil

Printed Name of Registered Professional Engineer


Signature of Registered Professional Engineer

Registration No. 062-028366 State Illinois

(Seal)

Date April 21, 1992

PCS # 01.01.15 ENG/ENV Rev. 1.0

Emergency Response/Spill Response Notification

Engineering/Environmental Services

| | |
|-------------------|--------------|
| John Mack | x7692 |
| Joe Markiw | x7662 |
| Security | x429 |

| | |
|------------------------------------------------|------------------------|
| <u>Cuyahoga Heights Fire Department</u> | 911 or 641-1923 |
|------------------------------------------------|------------------------|

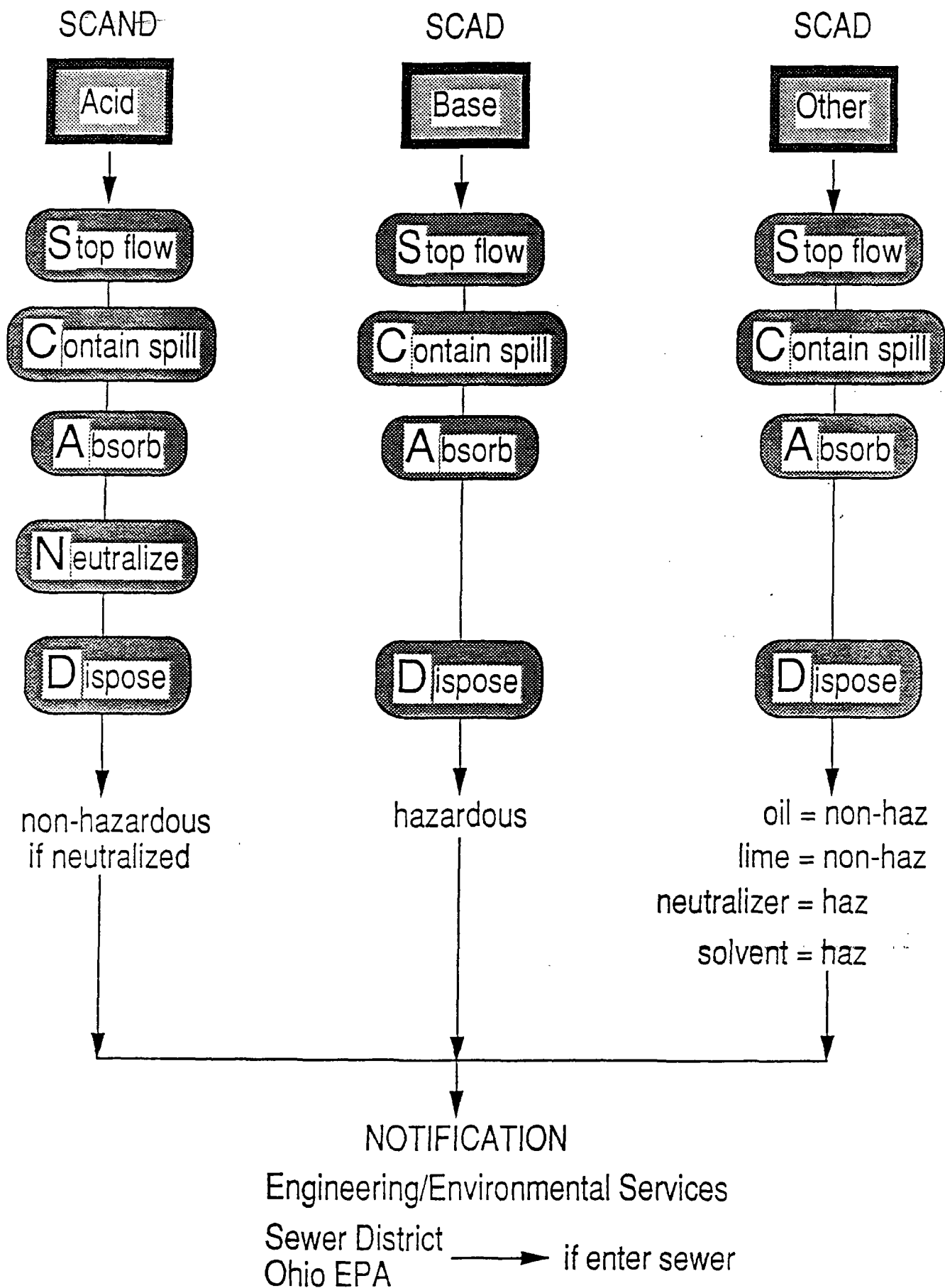
| | |
|--------------------------------|-----------------------|
| <u>Ohio EPA Hotline</u> | 1-800-282-9378 |
|--------------------------------|-----------------------|

| | |
|------------------------------------------------------|-----------------|
| <u>Northeast Ohio Regional Sewer District</u> | 641-6000 |
|------------------------------------------------------|-----------------|

24 Hour Emergency Spill Response

| | |
|--------------------------------|---------------------|
| Samsel Services Company | 216-861-3949 |
| Petroclean | 412-279-9556 |

Spill Response Flow Chart



EMERGENCY RESPONSE PLAN OUTLINE

PREPARE & PREVENT

1. Operate & Maintain Systems in a manner preventing leaks & spills
2. Monitor Systems to identify & react to malfunctions in early stages
3. Design, Install & Maintain control equipment to isolate leaks/spills from the environment

SPILL EVENT

EVALUATE MAGNITUDE

SMALL SPILL

SECURE SAFETY

Get Help if needed
Extinguish Flames/Avoid Sparks
Shut Off Electricity as necessary

CONTAIN SPILL
(if uncontained)

STOP LEAK/SPILL
(if possible)

PUMP TO
PORTABLE CONTAINERS

REMOVE FOR
RECLAMATION

CLEAN UP WITH
SORBENT MATERIALS

DISPOSE OF W/
RUBBISH
(no liquids)

NOTIFY SUPERVISOR

REPAIR & REPLACE
EQUIPMENT & SUPPLIES

LARGE SPILL

SECURE SAFETY

CONTAIN SPILL
(as able)

STOP LEAK/SPILL
(if possible)

PUMP TO
PORTABLE CONTAINERS

REMOVE FOR
RECLAMATION

NOTIFY SUPERVISOR

CONTACT
EHS/ENGINEERING

REPORT TO GOV.
(only if authorized)

REPAIR & REPLACE
EQUIPMENT & SUPPLIES

EHS/ENGINEERING

INVESTIGATE LAGOON/
RECIRCULATION
SYSTEM

ACTIVATE SKIMMERS
CONTINUOUSLY

BOOM PARSHALL FLUME
(if necessary)

REPORT TO GOV.

1.0 Emergency Oil or Hazardous Substances Spill Response Procedure

1.1 In the event of an Emergency Spill . . .

1. Secure your SAFETY and the SAFETY of others
2. Contain the Spill and stop the Source (when possible)
3. Initiate Clean-Up
4. Contact your Supervisor
5. (Supervisors) Contact Manager, Environmental Services or Authorized Manager for Reporting to appropriate Governmental Agencies

1.2 Wire Mill Corrosive Materials Handling and Spill Plan

Refer to Wire Corrosive Materials Handling and Spill Plan for specific procedures for dealing with spills of corrosive cleaning house chemicals. This plan is reproduced in Appendix Section 8.3.

1.3 Authorized Managers-Emergency Response Coordinators

| POSITION | DIVISION | WORK PHONE |
|---------------------------------|-----------|------------|
| Manager, Environmental Services | Corp. | 7692 |
| Manager, Eng/Env. Services | Corp. | 7662 |
| General Manager | Rod Mill | 7659 |
| Mgr. Mech. Maint. | Rod Mill | 439 |
| General Manager | Wire Mill | 309 |
| Operations Manager | Wire Mill | 470 |
| V. P. Operations | Corp. | 7641 |

1.4 Agencies Requiring Contact in the Event of an Oil Spill to a Waterway

| | |
|--------------------------------------|------------------------------------------------|
| Ohio EPA Hotline | 1-800-282-9378 |
| Ohio EPA District Office (Twinsburg) | (216) 425-9171 |
| National Response Center | 1-800-424-8802 |
| U. S. Coast Guard-Cleveland, OH | (216) 522-4404 (day) (216) 522-4412 (night) |

1.5 Additional Agencies for Contact or Assistance

| | |
|----------------------------------|----------------|
| ASW Emergency/Guard House | 429 |
| Cuyahoga Heights Fire Department | (216) 641-1923 |
| Cuyahoga Heights Ambulance | (216) 641-1923 |

1.6 24 Hour Emergency Response Companies

| | |
|-------------------------|----------------|
| Samsel Services Company | (216) 861-3949 |
| Petroclean | (412) 279-9556 |

2.0 Introduction

2.1 Description of the Facility

The American Steel & Wire (ASW) Cuyahoga Works is a secondary steel processing facility located in the southwest corner of the Cleveland South Quadrangle (T. 7 N. R. 12 W.) in a suburb of Cleveland known as Cuyahoga Heights, Ohio. The property consists of approximately 220 acres (Lots 271, 291, 292, 295 & 296) on the ridge of the valley,

descending on the south and west laterals to the floodplain and banks of the Cuyahoga River. Natural soils are sandy loams and clays. A significant portion of natural slope was raised to present grade by historical deposition and fill with steel mill slag.

Preliminary structures were constructed in the early 1900's and additional facilities have been added over time (under previous ownership) resulting in approximately 50 acres of building under roof. At one time, several metal processing operations existed and ran concurrently at this site. Presently, three mills and one processor operate at this facility: ASW Cuyahoga Rod Mill, ASW Cuyahoga Wire Mill, Gibraltar Strip Steel (a tenant company, independent from ASW) Cold Roll Mill and Nook Industries (another tenant). A significant portion of existing structures are currently vacant, but slated as rental properties for similar or complimentary businesses.

There are no blast furnaces at this location. Rod Mill operations consist of conditioning (grinding), heating and rolling elongated square, carbon, low-lead or occasional stainless steel billets into round rod which is coiled and banded prior to shipping. The rolling process utilizes service water for both contact and non-contact applications. The Wire Mill starts with carbon steel rod and draws it into wire through die machines. Additional processes include Heat Treating (annealing) and Metal Cleaning & Coating with sulfuric acid and/or various chemicals. Service Water is used for non-contact cooling. Gibraltar Strip Steel re-rolls strip steel (cold), heat treats and slits-to-size carbon steels. Service water is used for non-contact cooling.

The Ohio Canal terminates at the ASW property and, under lease from the State of Ohio, is the source of make-up Service Water for the Cuyahoga Works. Water is pumped up to the mills, utilized and returned into a settling lagoon from which most of it recirculates back up to the mills. Losses are compensated for with canal water, introduced into the system by opening electric controlled, level activated valves. A small percentage of water is blown down or discharged through a Parshall Flume to the Cuyahoga River under EPA NPDES Permit # OHD0002601.

2.2 Purpose of the Oil SPCC Plan

The American Steel & Wire Corporation and tenant companies utilize oils in day-to-day operations. ASW is committed to operating in a manner which minimizes adverse impacts on the natural environment (including oil spills and spills of hazardous chemicals), and, in compliance with all law and regulations. In order to fulfill this commitment, ASW has developed this Spill Prevention, Control and Countermeasure (SPCC) Plan to

- Identify all areas where significant quantities of oil and other hazardous chemicals are used, stored or handled, which could, if spilled or mishandled, cause a harmful discharge or reportable discharge under the Clean Water, RCRA, or CERCLA, to the Waters of the United States
- Design and install, where applicable and feasible, physical control devices to prevent such discharges
- Monitor through Inspection these systems for operation and effectiveness
- Provide equipment for Emergency Response
- Train employees on Spill Prevention as well as Emergency Response Procedures
- Establish Governmental Reporting Procedures to be activated if necessary
- Develop and record (as required) administrative procedures for all aforementioned activities

This written plan will be maintained for reference with the following persons at these designated locations

Manager, Environmental Services
 Manager Mechanical Maintenance
 Manager, Operations
 Manager Heat Treating

Engineering/Environmental Services Department
 Rod Mill
 Wire Mill Cleaning House Office
 Wire Mill (Heat Treating Office)

3.0 Identification of Oil and Hazardous Chemical Systems and Locations

3.1 System Identification and Location

| <u>MILL</u> | <u>OIL TYPE</u> | <u>SYSTEM</u> |
|---------------|---------------------------------|------------------------------------|
| ROD | Hydraulic-Glycol | Morgoil A System |
| ROD | Hydraulic-Glycol | Morgoil B System |
| ROD | Hydraulic-Glycol | AA System (No Twist, etc) |
| ROD | Hydraulic-Glycol | BB System (Dowenders) |
| ROD | Hydraulic-Glycol | CC System (Banders) |
| ROD | Hydraulic-Glycol | #1 Unloader |
| ROD | Hydraulic-Glycol | #2 Unloader |
| ROD | Hydraulic | Magnaglo |
| ROD | Hydraulic | Grinders (North & South) |
| ROD | Emulsion | Roll Shop Grinders |
| ROD | Mixed Oils | Scale Pit Oil Skimmer |
| ROD | Petroleum Prod. General Storage | Roll Shop |
| ROD | Petroleum Prod. General Storage | 5 Dock |
| ROD | Lube Oil | A Lube System |
| ROD | Lube Oil | D Lube System |
| ROD | Lube Oil | E Lube System |
| ROD | Circulating (Lube) Oil | EE Lube System |
| ROD | Lube Oil | Laying Heads (each) |
| WIRE | Circulating (Lube) Oil | Wire Drawing Machines |
| WIRE | Coating Oil | Shipping-Dip Tank |
| WIRE | Hydraulic-Glycol | Continuous Furnace |
| WIRE | Seal Oil | Heat Treat Basement (N&S) |
| WIRE | Petroleum Prod. General Storage | Maintenance |
| WIRE | Sulfuric Acid | Storage Tank by Continuous Furnace |
| WIRE | Sulfuric Acid | Cleaning House Process Tanks |
| WIRE | Sodium Hydroxide | Drum Storage Cleaning House |
| WIRE | Potassium Permanganate | Drum Storage Cleaning House |
| WIRE | Potassium Permanganate | Cleaning House Process Tank |
| WIRE | Calcium Hydroxide | Cleaning House Process Tanks |
| WIRE | Formcoat 1A, 1B | Cleaning House Process Tanks |
| General Plant | Mixed Oils | Oil Skimmers-Lagoon |

3.2 Physical Control Strategies

Physical spill control devices such as diking, plumbing changes, alarms, etc. are all outlined in the attached Mill Specific Appendices. For all systems, spills that breach containment in the storage area would enter the storm sewer system and be contained in the scale pit or recirculation lagoon where the oil or hazardous substance could be removed or stabilized.

3.3 Inspections

ASW and tenant companies will conduct inspections of oil systems and use/storage areas on a regular basis to monitor and verify the operation of the systems themselves, the operation and effectiveness of control and alarm devices and to identify for corrective action any spill or leak. Such inspections will be conducted according to the following schedule:

| <u>Oil System/Location</u> | <u>Inspection Frequency</u> | <u>Inspection Department</u> |
|----------------------------|-----------------------------|------------------------------------|
| Morgoil Oil Cellar | Daily | Rod Mill Mechanical Maintenance |
| AA System | Daily | Rod Mill Mechanical Maintenance |
| BB System | Daily | Rod Mill Mechanical Maintenance |
| CC System | Daily | Rod Mill Mechanical Maintenance |
| EE System | Daily | Rod Mill Mechanical Maintenance |
| Scale Pit Oil Skimmer | Daily | Rod Mill Mechanical Maintenance |
| #1 Unloader | Weekly | Rod Mill Mechanical Maintenance |
| #2 Unloader | Weekly | Rod Mill Mechanical Maintenance |
| Blower Room-Laying Heads | Weekly | Rod Mill Mechanical Maintenance |
| Roll Shop | Weekly | Roll Shop |
| Bell Annealing | Shift | Wire Mill Heat Treating |
| Continuous Furnace | Daily-When in Operation | Wire Mill Heat Treating |
| Cleaning House Chemicals | Daily/Weekly | Wire Mill Cleaning House |
| Lagoon Oil Skimmers | Weekly | Engineering/Environmental Services |
| Spill Control Kits | Monthly | All Mills with Above Systems |

4.0 Emergency Response Equipment

Emergency Response Equipment, in the form of Spill Control Kits, will be located in various areas. Each mill and the Eng/Environmental Services Department will maintain spill kits containing granular absorbent material, absorbent sheets and booms, shovels, safety gear (spill suits, gloves, pits, etc.).

Each department is responsible for maintaining the Spill Control Kit(s) in their respective areas, evaluating the availability and condition of all items and ordering new equipment as needed. A department may modify the contents of each kit (eg. increase the number of sorbent booms, etc.) to most effectively address the conditions at hand.

5.0 Training

In order to implement this SPCC Plan, ASW will train ASW employees on its contents, availability, oil spill prevention strategies and emergency response procedures. The Manager EHS will conduct training sessions. At a minimum, the following persons will participate in training:

Vice President-Operations
General Managers-Cuyahoga
All Managers-Cuyahoga

In addition, the General Managers will designate other Production & Maintenance personnel in their respective areas for training participation. Those employees who should attend include persons responsible for:

- oil system inspection
- oil system operation, repair and maintenance
- emergency spill response

Training will be based upon the following outline:

I. Law & Regulations

- A. SPCC Requirements
- B. Harmful Discharge (def.)
 1. Violation of Water Quality Standards
 2. Film or sheen upon or discoloration of the water

C. Notification of Government Agencies

1. Authorized Managers
2. How to Report

II. Spill/Leak Prevention

A. Purpose

1. Oil and water: properties and characteristics
 - petroleum
 - glycols
2. Environmental impacts
3. Oil skimmer efficiencies

B. Procedures

1. Preventive maintenance
2. Inspection

C. Physical Control Strategies

1. Secondary containment (dikes, dams, curbs, blind/manual sumps, overflow tanks, etc)
2. Alarms

III. Spill Response and Control Strategies

A. Routine Oil Collection

1. Portable containment
 - use
 - removal/reclamation

B. Emergency Response

1. Small Spills
 - Spill Control Kit- use
2. Catastrophic Spills
 - immediate containment
 - removal to portable containers
 - lagoon investigation, skimmer continuous operation, discharge booming

IV. Spill Countermeasure and Clean-Up

A. Clean-Up Materials

1. Handling
2. Disposal

B. Area & Equipment Clean-Up

1. Repair and wipe down, detergent wash or solvent rinse equipment as appropriate for housekeeping and operation
2. Detergent mop floors to prevent slips
3. Remove contaminated soils (where feasible and necessary for further pollution prevention)

C. Notification

1. Contact supervisors for investigation and equipment replacement
2. Contact Manager EHS for formal notifications

Exact details will be outlined in training script.

6.0 Governmental Notification

In the unlikely event of a significant release of oil or other hazardous chemical to the Waters of the United States from this facility, ASW will take the necessary actions to control, contain and clean up the spill. Within one (1) hour of discovery of the discharge and within five (5) days in writing, the manager of environmental services will notify the appropriate agencies. If the manager of environmental services is unavailable, notice will be made by an alternate manager authorized as follows:

Manager, Engineering/Environmental Services
General Manager

Department Manager
Shift Supervisor (when previously delegated and instructed by Department Manager)

Notice shall be made to

Ohio EPA Emergency Response and District Office
National Response Center
U. S. Coast Guard (Cleveland, OH)

Phone numbers for these agencies can be found on the second page of this document.

Information provided should include

Responder's Name

Company Name
Address

American Steel & Wire
4300 East 49th St.
Cuyahoga Heights, OH 44125

Company Phone #

(216) 883-3800

Date of Incident
Time of incident

Type of material spilled
Approximate quantity released

chemical name
(gallons)

Water Body into which spill
entered

Cuyahoga River, Ohio Canal, etc.

7.0 Administrative Procedures

7.1 Record Keeping

The Manager EHS will maintain on file for at least three years all records pertaining to

inspections
training
incident reporting
notifications
program review and amendment

7.2 Security

The ASW Cuyahoga facility guarded and patrolled 24 hours per day by an independent security company, coordinated and supervised by the ASW Vice President Human Resources. Guards patrol the entire facility, including the water recirculation lagoon area, on a routine basis.

7.3 Plan Review

The Engineering/Environmental Services will review this plan bi-annually in January.

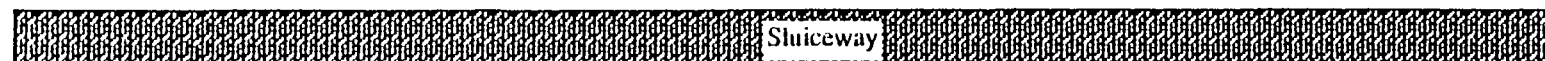
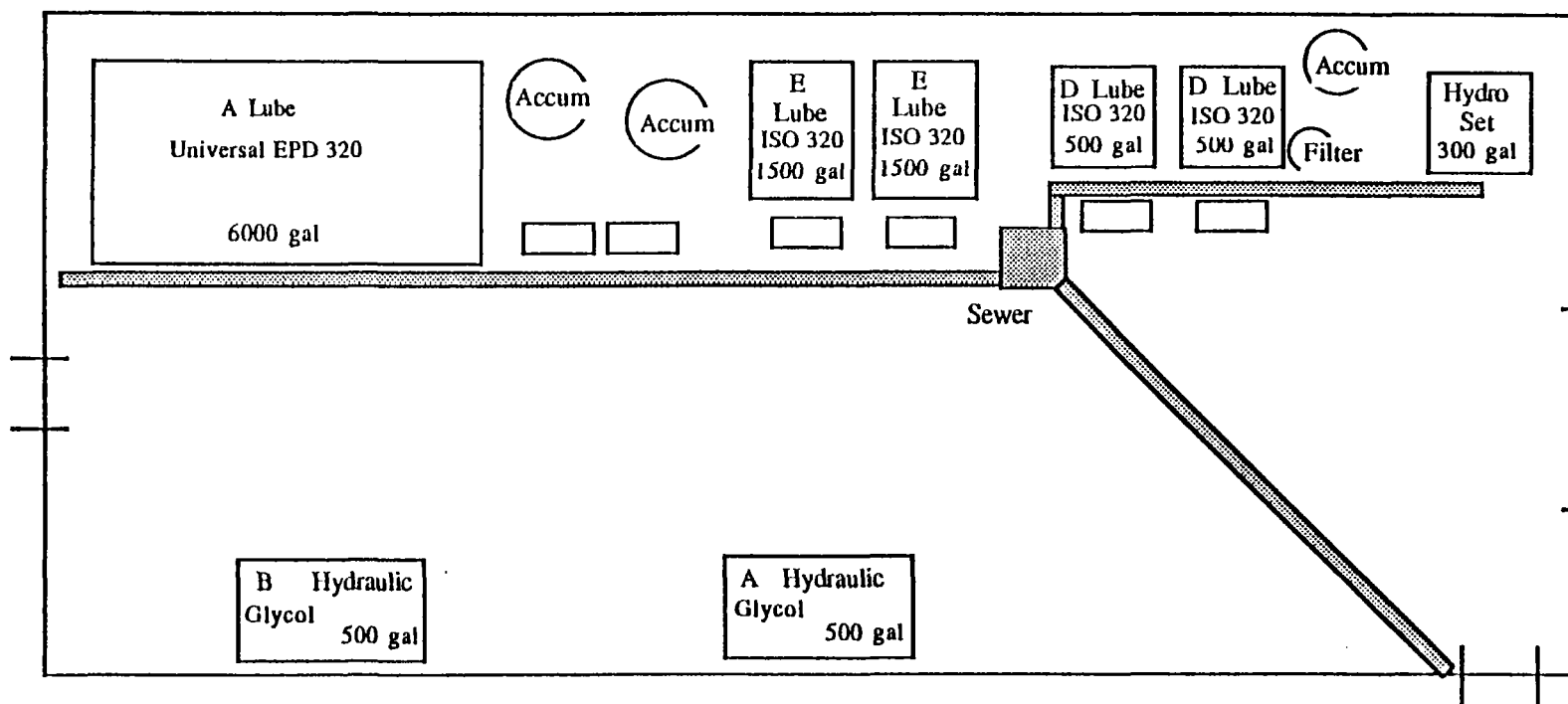
8.0 Appendices

8.1 Rod Mill

EXISTING

ROD MILL MORGOIL OIL CELLAR

- A Lube: Mill Motor Bearings, Reducers, Drives,
C & C Shears
- E Lube: Intermediate Stands 6-13
- D Lube: Roughing Stands 1-5
- Hydroset: D & E System Oil/Water Separation
- A Hydraulic: Switch Trough, Peel Bar, Top Pull-Out Roll
- B Hydraulic: Roughing & Int. Roll Stand Chocks

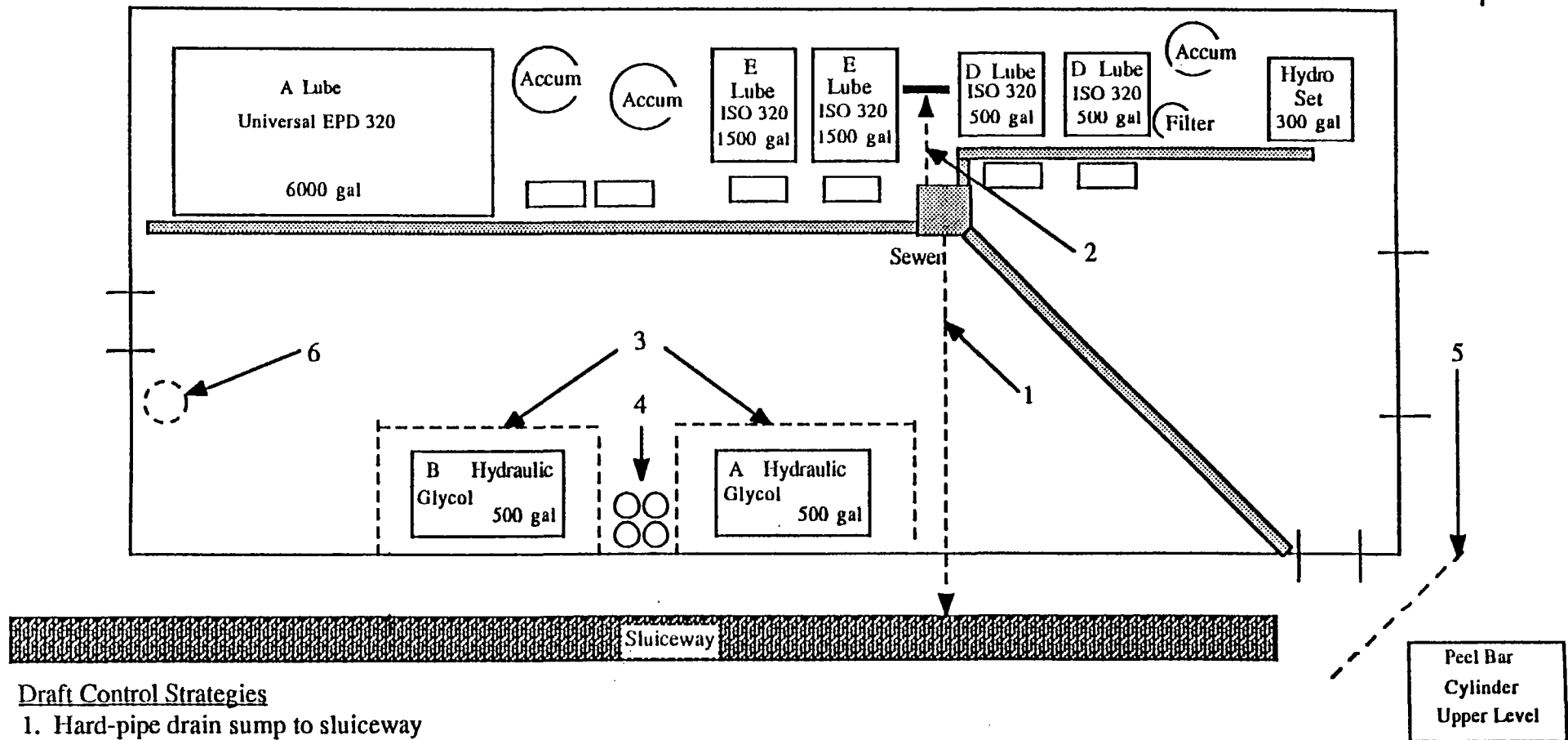


Peel Bar
Cylinder
Upper Level

PROPOSED

ROD MILL MORGOIL OIL CELLAR

- A Lube: Mill Motor Bearings, Reducers, Drives,
C & C Shears
- E Lube: Intermediate Stands 6-13
- D Lube: Roughing Stands 1-5
- Hydroset: D & E System Oil/Water Separation
- A Hydraulic: Switch Trough, Peel Bar, Top Pull-Out Roll
- B Hydraulic: Roughing & Int. Roll Stand Chocks



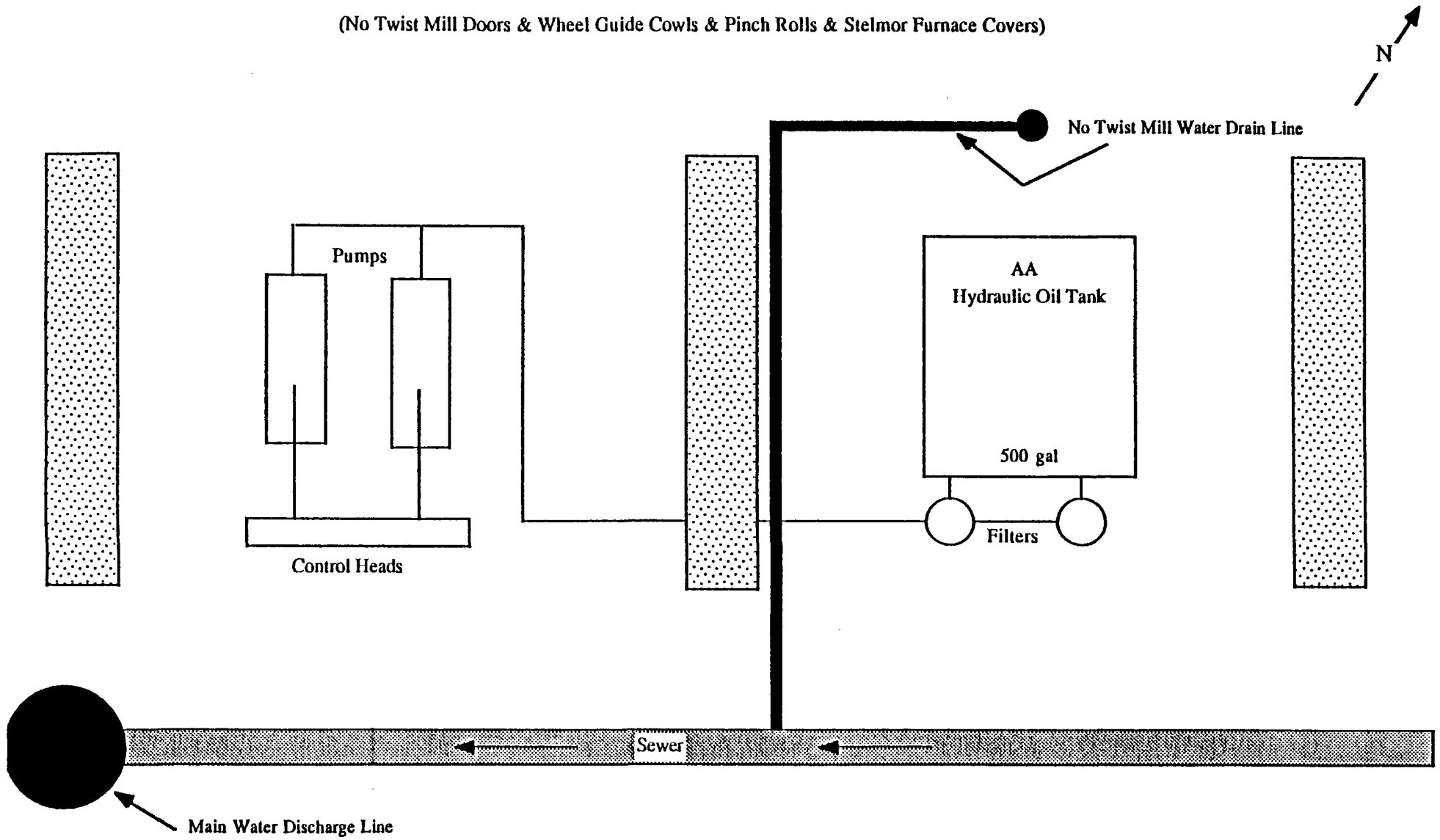
Draft Control Strategies

1. Hard-pipe drain sump to sluiceway
2. Isolate & plug northbound invert drain to sewer
3. Isolate glycols from water & other oils by diking A Hydraulic & B Hydraulic Systems
4. Maintain removable containers into which spilled/leaked glycols can be pumped and periodically removed for recycle or disposal
5. Isolate/eliminate leaks from the Peel Bar cylinder
6. Equip & Maintain a container of Spill Response Materials

AA
Hydraulic System

EXISTING

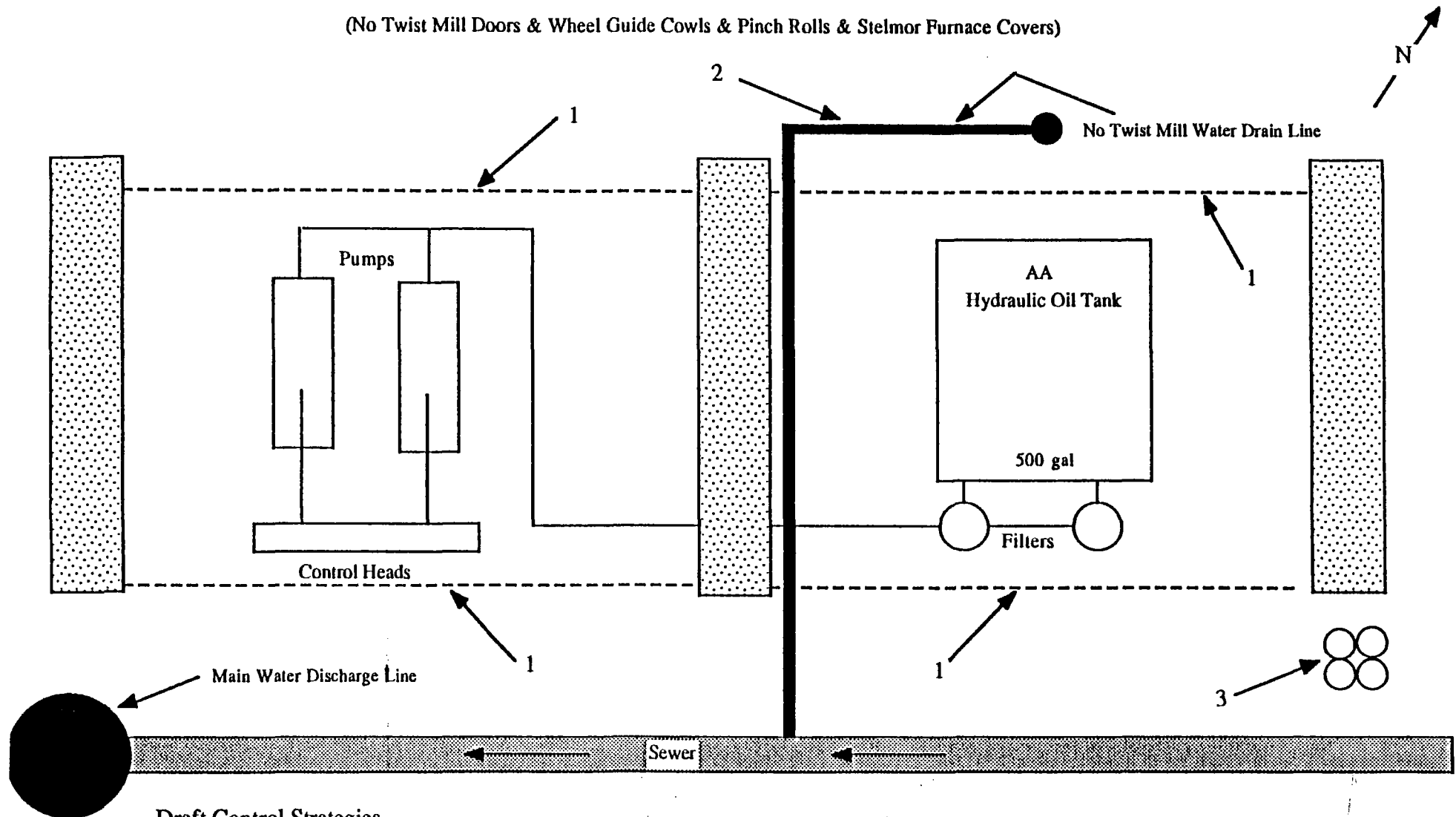
(No Twist Mill Doors & Wheel Guide Cows & Pinch Rolls & Stelmor Furnace Covers)



AA
Hydraulic System

PROPOSED

(No Twist Mill Doors & Wheel Guide Cows & Pinch Rolls & Stelmor Furnace Covers)



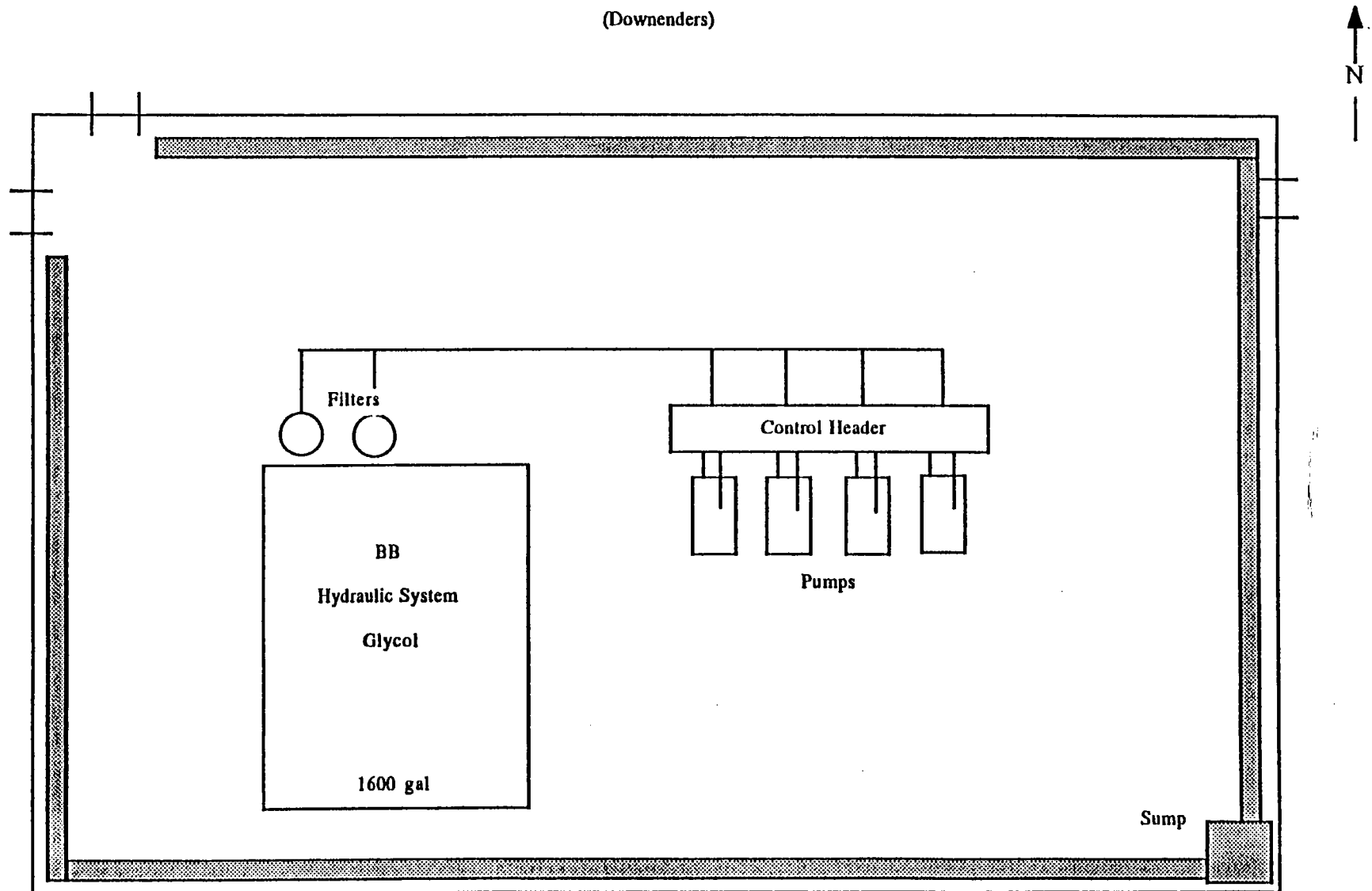
Draft Control Strategies

1. Dike in entire system to completely isolate from drain
2. Reroute No Twist Water Drain (elevate a few feet) to flow over the dike and into the sewer drain line
3. Maintain removable containers into which oils, accumulating within the diked areas, can be pumped and periodically removed for recycle

EXISTING

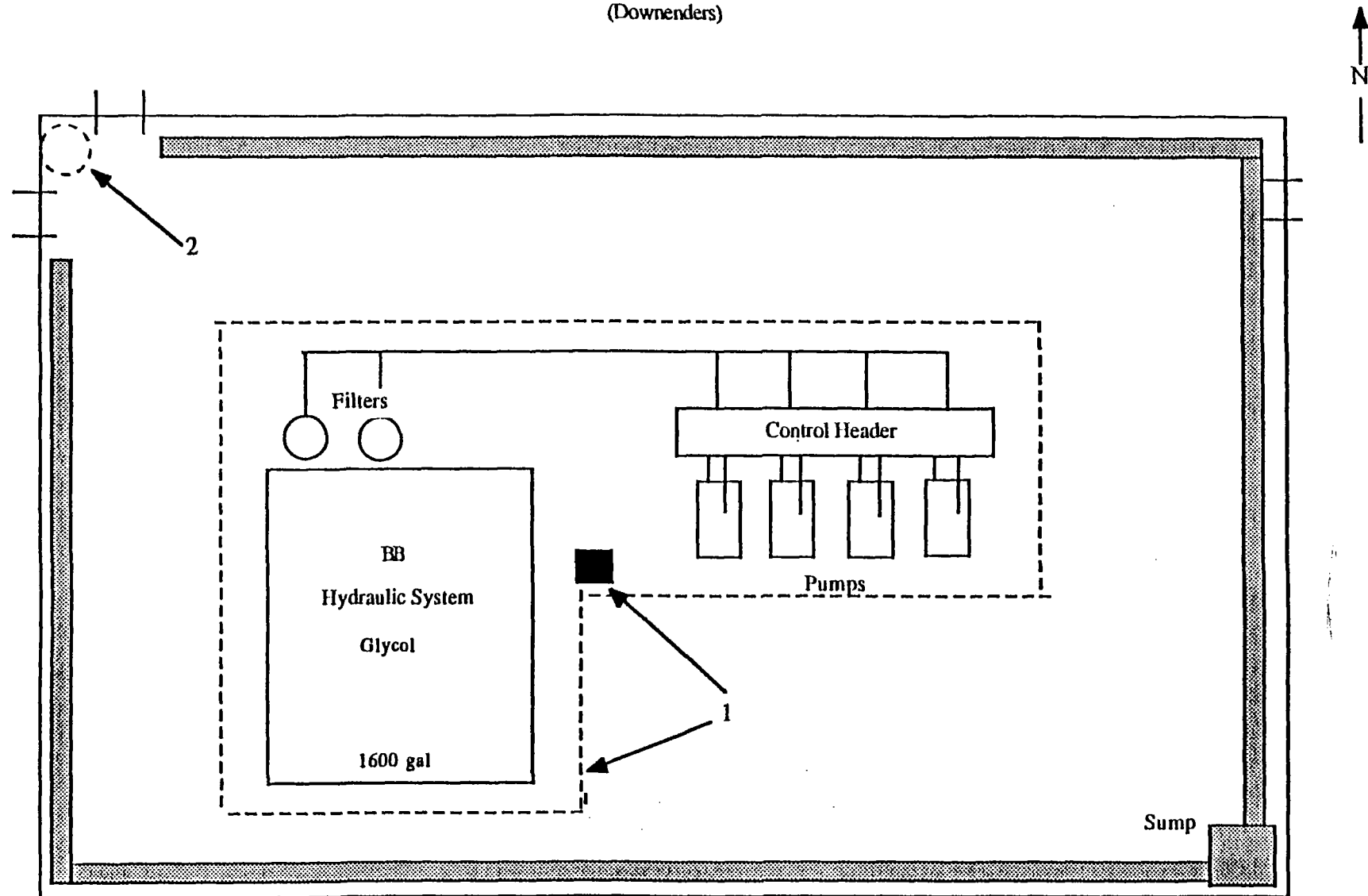
**BB
Hydraulic System**

(Downenders)



**BB
Hydraulic System
(Downenders)**

PROPOSED

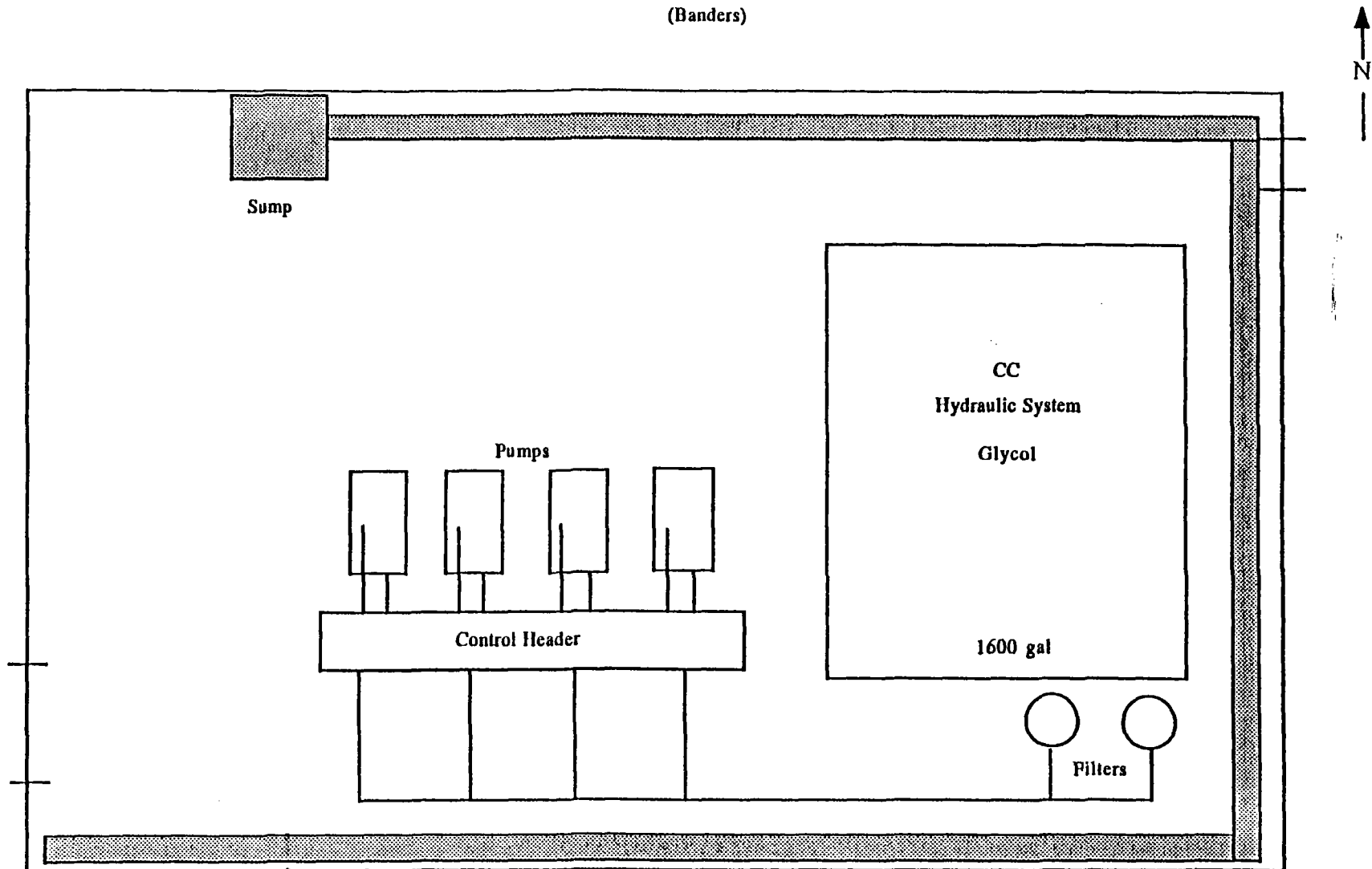


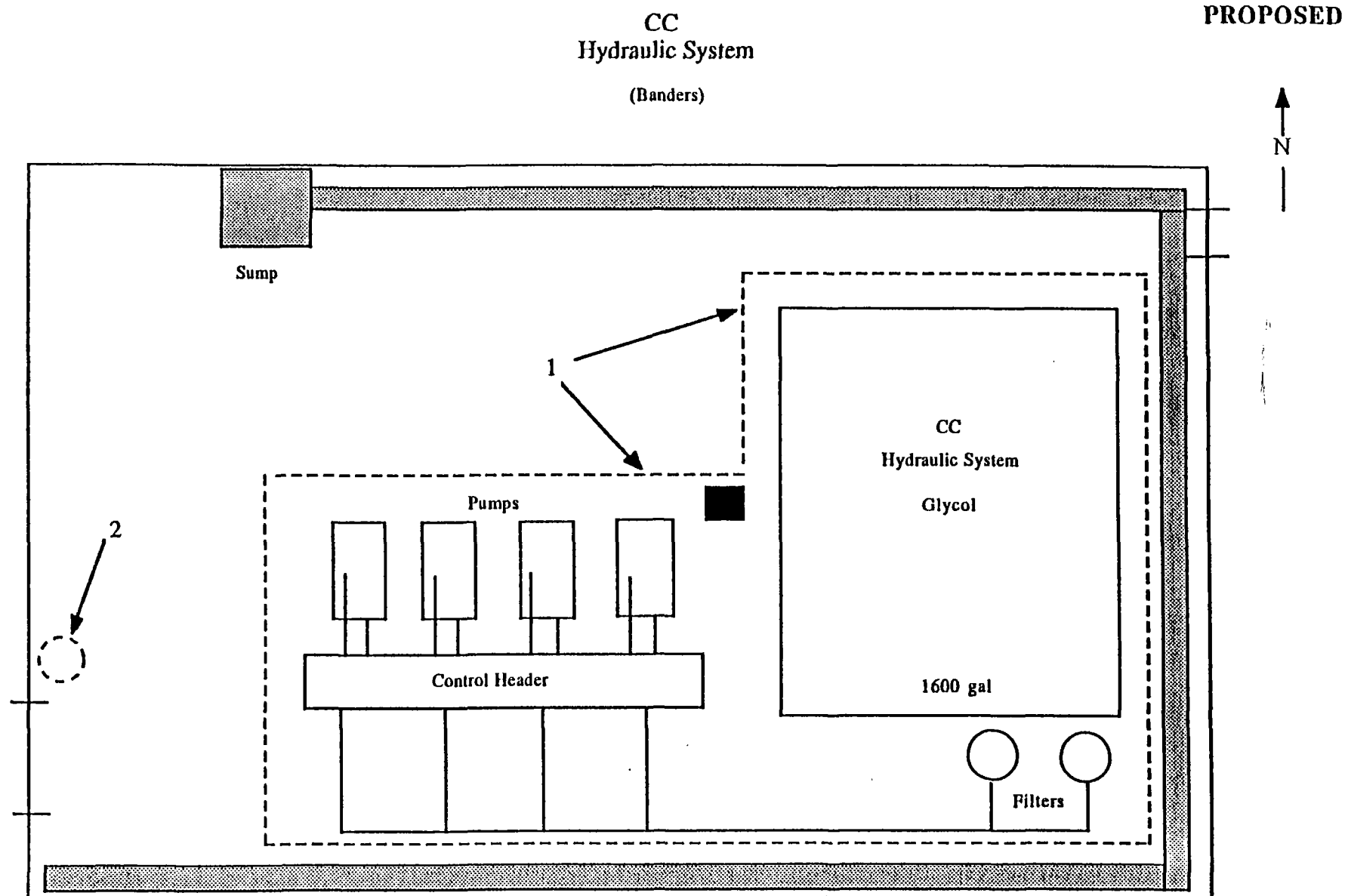
Draft Control Strategies

1. Install a dike with a sump to contain glycol leaks/spills and to isolate them from the Industrial Water System
2. Equip & Maintain a container of Spill Response Materials

**CC
Hydraulic System
(Banders)**

EXISTING





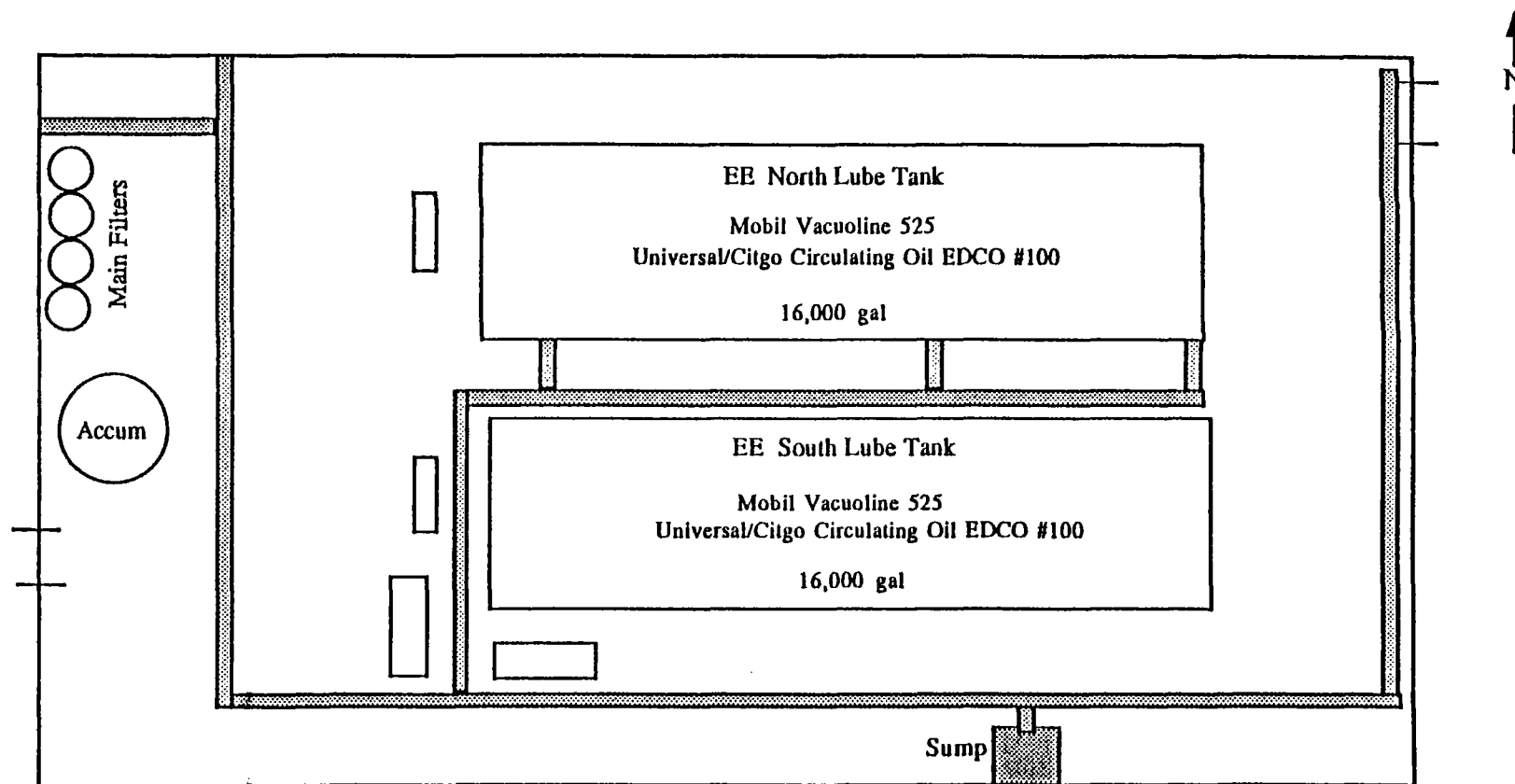
Draft Control Strategies

1. Install a dike with a sump to contain glycol leaks/spills and to isolate them from the Industrial Water system
2. Equip & Maintain a container of Spill Response Materials

EXISTING

ROD MILL
EE LUBE CELLAR

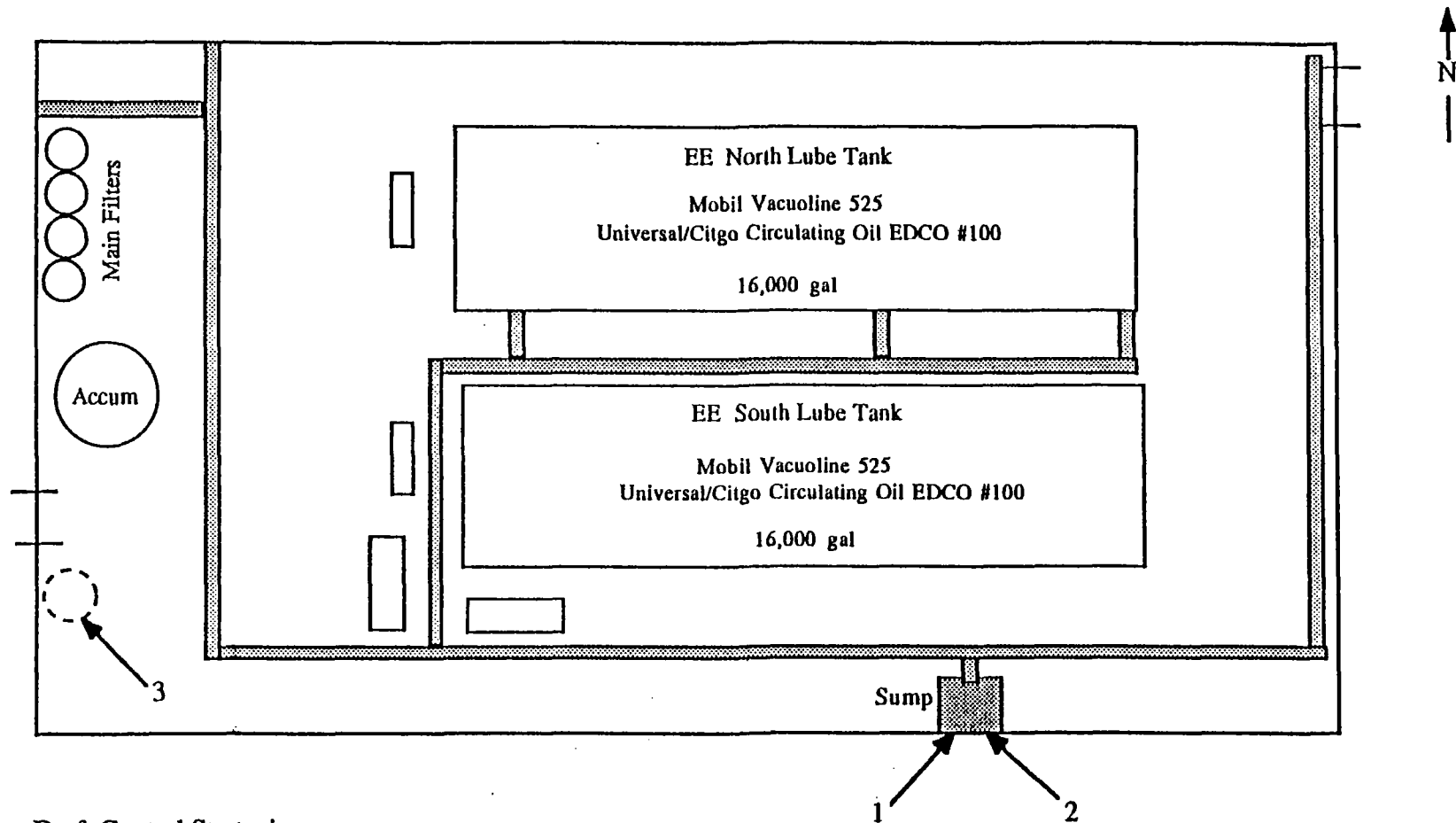
(No Twist Mill & Pinch Rolls, 3-Hi Drives, C & D Shears, Laying Heads)



PROPOSED

ROD MILL
EE LUBE CELLAR

(No Twist Mill & Pinch Rolls, 3-Hi Drives, C & D Shears, Laying Heads)

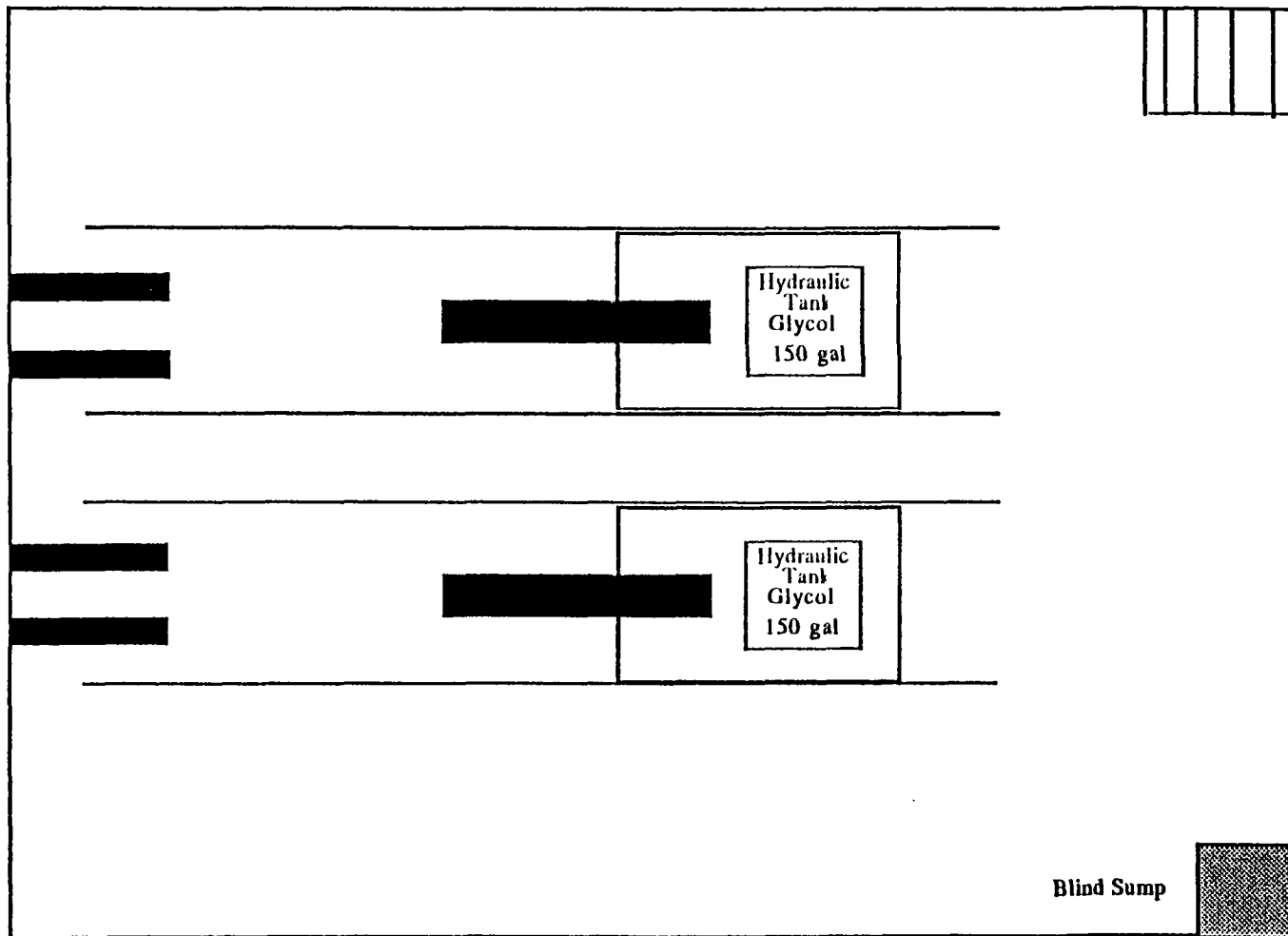


Draft Control Strategies

1. Reroute sump discharge to sluiceway/scale pit
2. Install a High Level Alarm, sounding in maintenance or other appropriate area, set to indicate an unusually high level (not just leaks & drips) of liquid in the basement. Such a system would allow for response & action preventing a catastrophic spill from being released into the sewer system
3. Equip & Maintain a container of Spill Response Materials

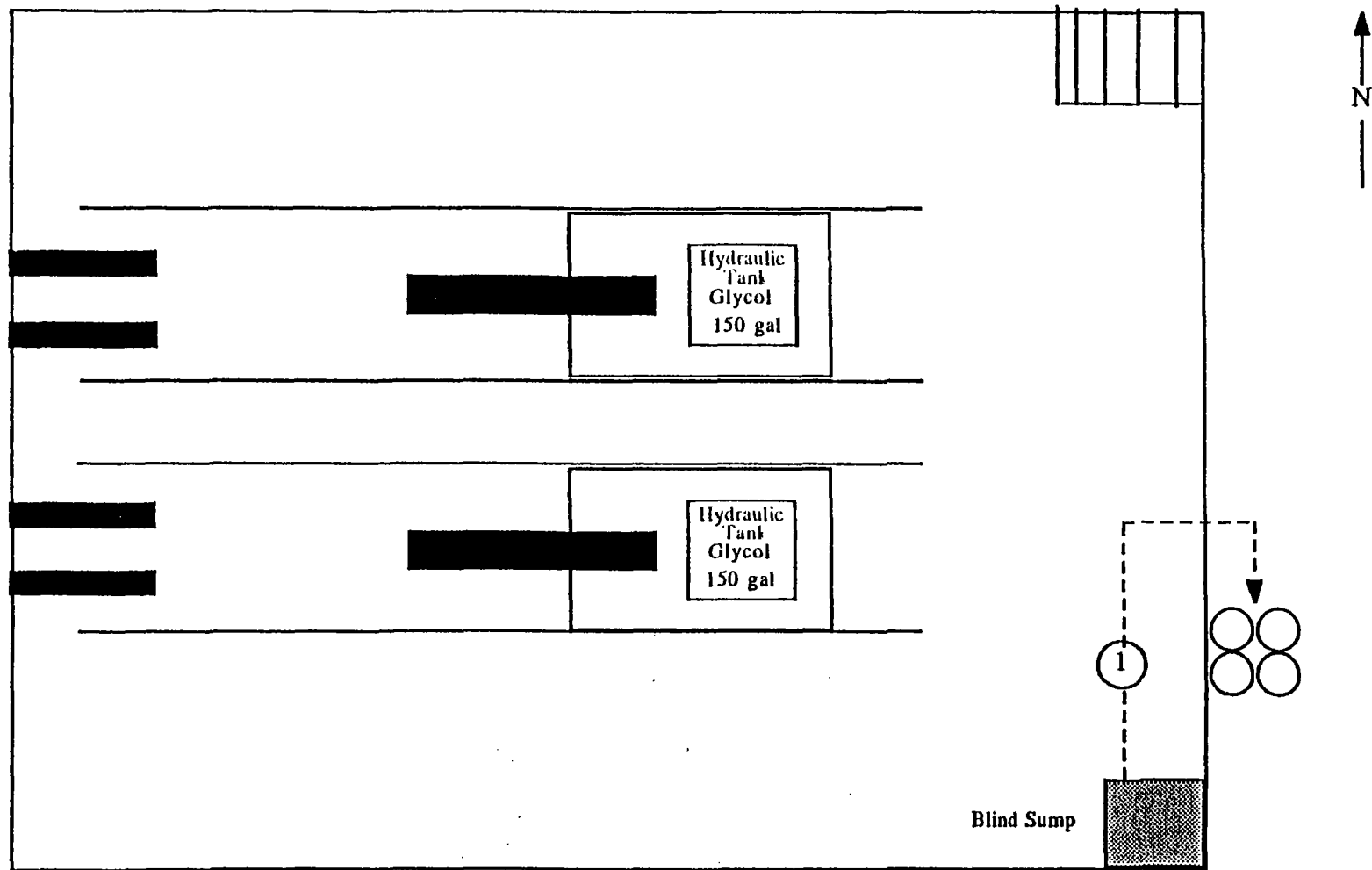
1 Unloader

EXISTING



1 Unloader

PROPOSED

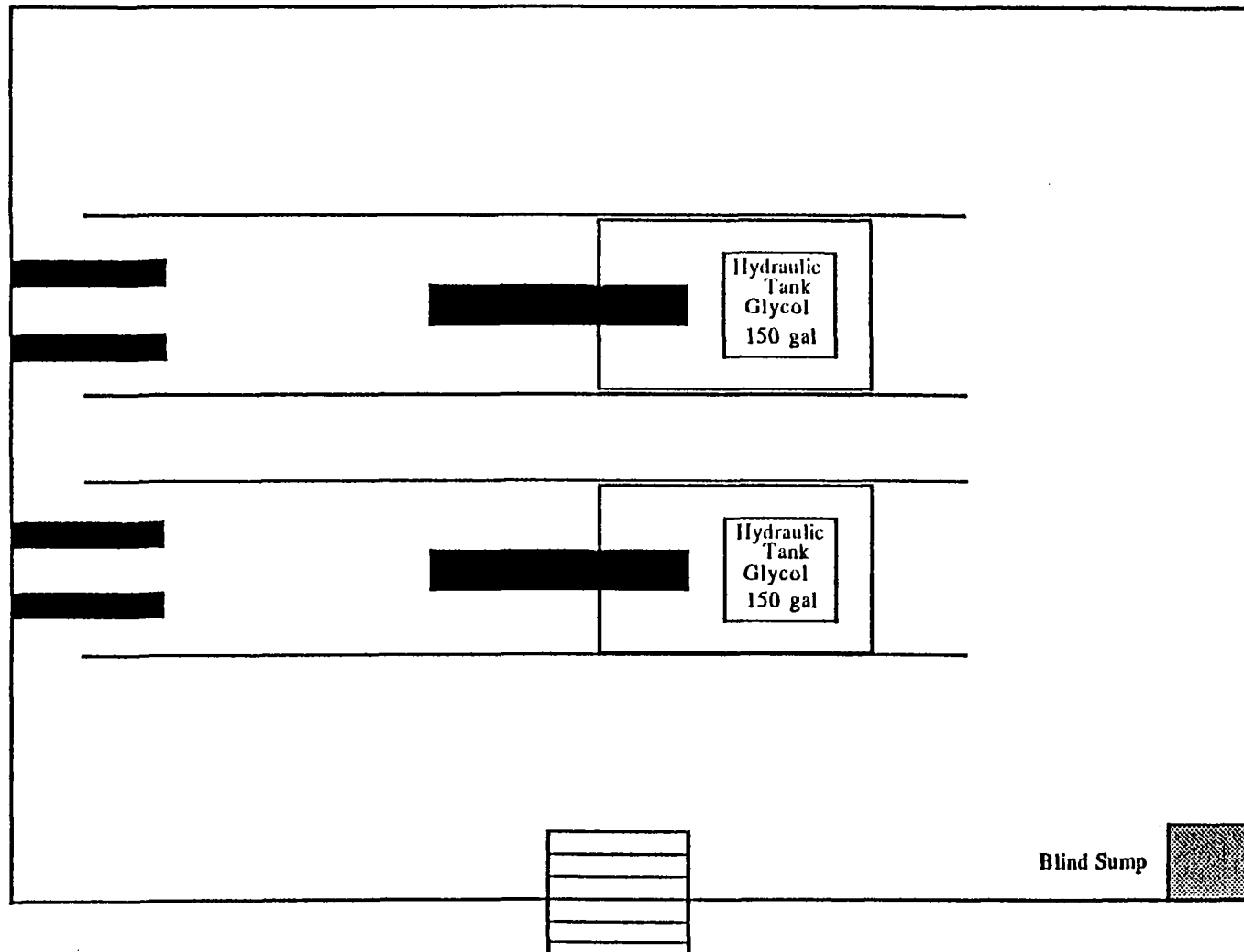


Draft Control Strategies

1. Maintain removeable containers into which spilled/leaked glycols, collecting in the blind sump, can be pumped and periodically removed for recycle or disposal

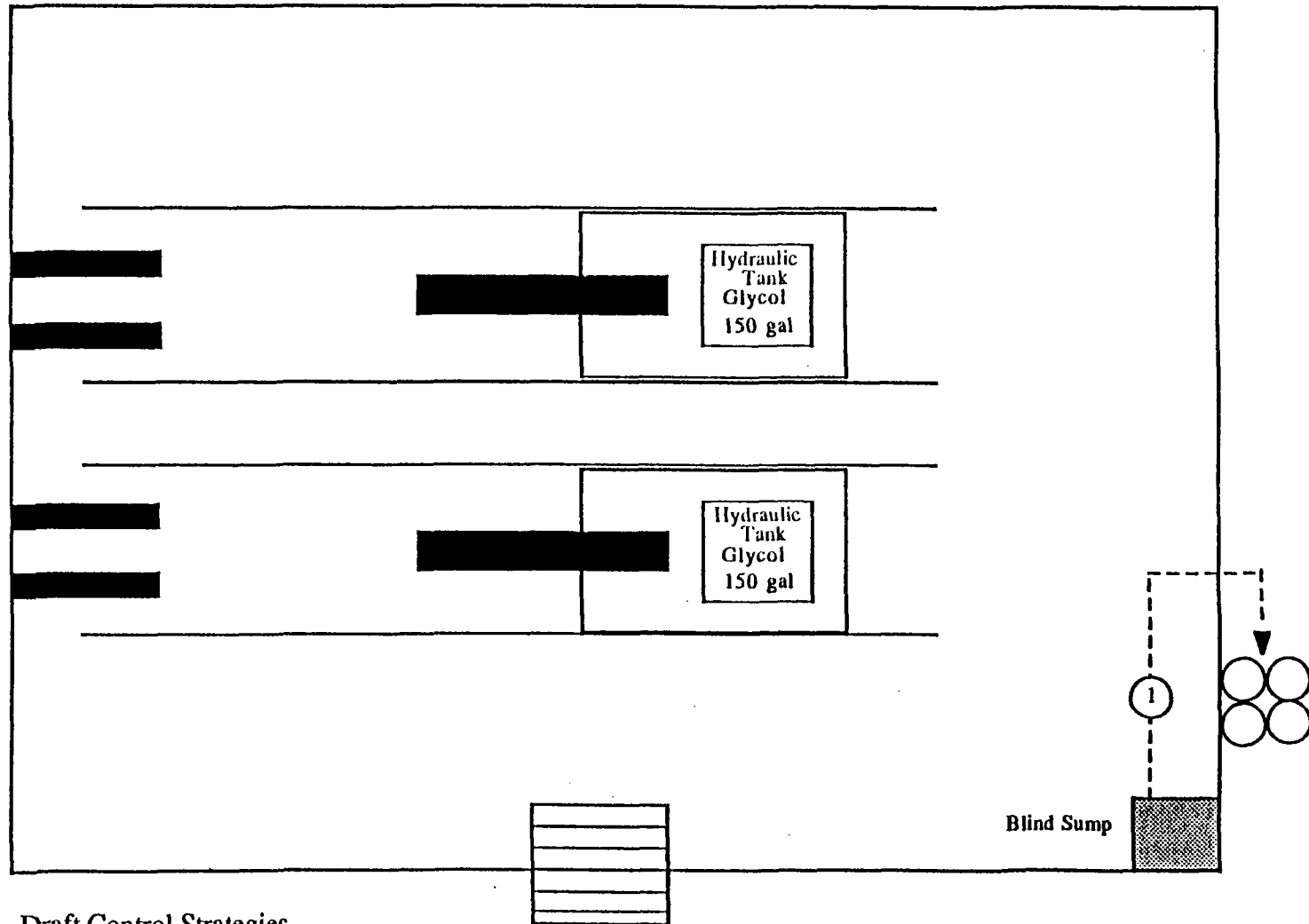
EXISTING

2 Unloader



2 Unloader

PROPOSED



Draft Control Strategies

1. Maintain removeable containers into which spilled/leaked glycols, collecting in the blind sump, can be pumped and periodically removed for recycle or disposal

8.2 Wire Mill

8.3 Wire Mill Corrosive Materials Handling Plan



AMERICAN STEEL & WIRE CORPORATION

Cuyahoga Works
4300 East 49th Street
Cuyahoga Hts., Ohio 44125

**WIRE MILL CORROSIVE MATERIALS
HANDLING AND SPILL PLAN**

March 15, 1992

I. ACID RECEIVING PROCEDURES

General Procedure:

1. Supplier/driver notifies ASW shipping department upon arrival.
2. Shipping department notifies cleaning house of delivery.
3. Shipping department contacts Cleaning House Lab Technician or duty pipefitter to have them inspect valves. Make sure valves are open and acid tank will accomodate amount of acid being delivered.
4. After inspection of valves, have driver put on his safety gear. All necessary clothing/equipment must be worn by person pumping the acid at all times.

Gear Required:

Splash suit
Rubber gloves
Helm
Rubber boots
Face shield

5. Shipping department will inspect eyewash and shower to ensure proper function.
6. Shipping personnel ensure shower alarm is turned on. Located on south wall just inside archway between shipping and wire drawing.
- 7.If safety shower, eyewash, and alarm are functioning, driver may then be authorized to start pumping.
- 7(a).If shower, eyewash, or alarm is not working, contact maintenance for repair. **No pumping is to take place without safety equipment operating properly.**
- 9.Log material in daily receiving log and attach packing slip and delivery receipt.

II. ACID STORAGE

General :

1. Gauge/check acid volume at least once per week.- Responsibility C.H Lab Tech.
2. Inspect tank and lines for leaks weekly. - Responsibility C.H. Maintenance
3. Protective equipment and clothing must be worn at all times while inspecting, gauging, or working on or near storage tanks and/or the acid line.

Future Projects:

1. A shower and a communication/alm system needs to be installed somewhere in the area.
2. Gauging procedures - The acid volume is presently gauged by employees using a dip-stick. The procedure is risky because the individual doing the gauging has to climb up onto the tank. Bob Wilson should be contacted and asked about the present procedure and whether he feels there are any viable alternatives.
3. Obtain information concerning the volume and frequency of acid delivery, the maximum volume of the acid storage tanks, and the average length of time acid remains in the tanks (how much is pumped daily into the cleaning house for use.)
4. Label the acid tanks and acid line to the cleaning house.
5. Obtain information concerning the shut-off valve system for eventual training purposes.

III. ACID HANDLING IN CLEANING HOUSE

General Procedure:

1. Inspect acid line weekly
2. Spills to basement must be either :
 - a. contained for re-use or waste disposal, or
 - b. neutralized prior to discharge into sanitary sewer
3. Acid is stored in a container near the Keramchemie and fed into the Keramchemie as needed which, in turn, feeds the now less concentrated acid into the wire pickeling tanks. The acid from the tanks is recycled through the keramchemie and reused until arrangements can be made for removal.
4. The above listed items are the responsibility of the Cleaning House Maintance Dept.

Future Projects:

1. Obtain information concerning the shut-off valve system. Mark location of shut-off valves on acid map (drawing of wire mill) in preparation for training program.

IV. PROCEDURE FOR WASTE ACID DISPOSAL

AS&W currently disposes of our waste acid directly into a tank truck, which is then hauled off the premises and disposed of in a proper manner.

A. General Procedure:

1. AS&W contacts waste acid hauler to set up disposal date.
2. Supplier/driver notifies AS&W Cleaning House upon arrival.
3. Waste hauler then enters Wire Mill, drives to the Cleaning House area, and locates his truck for proper removal.
4. After inspection of his equipment, driver is responsible to wear all safety gear.
5. Cleaning House will inspect eyewash and shower, and if functioning, driver is then permitted to start removal. If eyewash and shower is not functioning, contact Cleaning House Maintenance for repairs.
6. No removal is to take place without equipment operating properly.
7. Driver places hoses in containment and proceeds to remove spent acid from containment.
8. Driver/operator contacts the proper Cleaning House personnel when removal is completed.
9. Cleaning House personnel and hauler are to complete the Hazardous Waste Manifest and Land Ban Form. (see procedure herein)

B. Future Projects:

1. Obtain information as to who the transporter/disposer is, the frequency of removal, and the average amount of removed each time.

V. SPILL RESPONSE PROCEDURES

1. Call for assistance

2. Isolate hazard area

3. Put on personal protective equipment

Faceshield
gloves

Protective suit (jacket & pants)
boots (rubber, PVC, nitrile, or neoprene materials)

4. Stop flow or spray of acid with shut-off valves

Cover storm sewer with sewer drain if a sewer is in the area

5. Contain spill:

Pumpable quantities should be contained for pumping into a holding container, otherwise absorb all free liquids with floor-dry sorbent materials (creating a less reactive semi-solid)

6. Neutralize the semi-solid with soda ash (Na_2CO_3) or lime ($\text{Ca}(\text{OH})_2$ or CaO) until the pH is at least 4

7. Shovel the neutralized semi-solid into containers for non-hazardous, solid industrial waste disposal

8. Wash down the area thoroughly with water

9. Complete incident report and notify EH&S department

First Aid Procedures

1. Speed in removing substance from skin is extremely important.

2. Flush with **water** for at least 15 minutes.


3. Remove contaminated clothing and isolate it at the spill/leak site.

5

VI. LOCATIONS FOR SPILL EQUIPMENT

| | <u>NUMBER</u> | <u>LOCATION</u> | <u>CARETAKER</u> |
|-----------------------------|---------------|-----------------------------------------------|--------------------|
| Safety Locker | 1 | Cleaning House near Keramkemie | E. Sherry/B.Wilson |
| | 2 | Near acid storage tanks by continuous furnace | B. Wilson |
| | 3 | Shipping Dock - southeast corner | J.Kramarz Sr. |
| | 4 | Cleaning House temp. control room. | E.Sherry |
| Cleanup Pallet | 1 | Cleaning house near Keramkemie | E Sherry/B.Wilson |
| | 2 | Near acid storage tanks by continuous furnace | B. Wilson |
| Showers/ Eyewash | 1 | Cleaning house near Keramkemie | E. Sherry |
| | 2 | Outside, near shipping dock | B. Wilson |
| | 3 | Near acid storage tanks by continuous furnace | B. Wilson |

Approved for Implementation


 Manager, Cleaning House

5-20-92
 Date

VI. PROCEDURES FOR COMPLETING HAZARDOUS WASTE MANIFEST AND LAND BAN CERTIFICATION FORM

The following procedures update the steps which must be taken whenever hazardous waste is removed from ASW. The procedure for completion of a hazardous waste manifest remains the same. The only additional steps, arise out of EPA's more recent land disposal rules requiring that a land ban form be sent along with every shipment of hazardous waste. The Land Ban Certification form contains all of the required information and it's completion will only require a few minor steps. Procedures for completion of manifests and land ban forms are included herein.

Generating Mill Responsibilities

1. Arrange for the pickup of material
2. Notify scale house operator of the date and approximate time of pickup.
3. Complete and sign the hazardous waste manifest(see attachment A & C for instructions)
4. Complete and sign the Land Ban Certification form. (see attachment B for instructions)
5. Maintain records and copies of the manifests and land ban forms.
6. NOTE: a) Each shipment/truckload must have its own manifest.
 b) See attachment B for a list of individuals authorized to sign the manifests and land ban forms.

Scale House Operator Responsibilities

1. Weigh trucks upon entry and exit.
2. Note the weight (in pounds) on the hazardous waste manifest (sections 13 & 14).
3. Make sure that the driver enters the the total volume (in gallons) for liquid cargo.
4. Photocopy the original completed manifest.
5. Photocopy the completed Land Ban Form.
6. Forward to the Manager, Environment, Health, and Safety (Joe Markiw):
 - a. the generator copy of the manifest packet,
 - b. the photocopy of the original manifest, &
 - c. the photocopy of the Land Ban cetification form.

Environment, Health and Safety Responsibilities

1. Issue sequentially numbered manifests to mills as needed. (be sure they are numbered and logged) Also issue land ban forms as needed.
2. Maintain records of manifests and land ban forms.
3. Complete and file annual hazardous waste reports with Ohio EPA.

ATTACHMENT A

1. ASW Hazardous Waste Manifests: Information for completion

Manifest item
Number

1. OHD 004 220 810 (US EPA generator ID# specific for ASW cuyahoga works)

3. American Steel & wire Corporation (Generator name & address)

4300 East 49th Street

Cuyahoga Heights, Ohio 44125

4. (216) 883-3800 (generator phone number)

5-8 Should be completed by transporters.

NOTE: Transporters will normally be aware of their responsibilities concerning the manifest's completion. However, under certain circumstances, wire mill personnel will have to complete (TYPE) this information ahead of time. Designation of these responsibilities should be arranged with the transporter and receiving facilities prior to removal of the waste. (see attachment E)

9-10 Should be completed by AS&W prior to transporter arrival.

11. HM - Mark an "X" in the box if the material is a hazardous material.

Also complete the "US DOT Description" section to include certain shipping information (see attachment D for "HM" status and waste specific information)

12. (see attachment C for container codes) This section may be hand printed (to accurately reflect the true shipment container of the day.) Normally, waste will be hauled offsite in a tanker truck (cargo tank) and therefore the appropriate *container type* will be "TT". Since one manifest is required for each shipment/truckload the *container No.* will normally be "01". (these items may be pre-completed whenever possible.)

13-14 Pounds should be listed by the Scale House Operator. Gallons (for liquids) should be listed by the transporter. Enter the total quantity/amount of the material in item #13 and, along side of that, in item #14, enter the respective unit of measurement (ie. P = pounds, and G = gallons)

15. Specify hazard warning and protective equipment here (see attachment D for info.)

ATTACHMENT B**Land Ban Certification Form:
Completion instructions**

1. Fill in proper address and mark an "X" in the appropriate box signifying which mill the waste is being removed from
2. Mark an "X" on one of the lines next to the listed wastes to identify the material which is being shipped
3. Mark an "X" on the line next to the applicable certification/notification category. (The correct category to mark can be identified by looking to the column along side of the particular waste being shipped under the heading of "Mark Category".)
4. In the Waste Analysis column, circle "YES" if a waste analysis accompanies the land ban form and circle "NO" if no analysis accompanies.
5. Print name and write signature.

**Authorized Signatures
(for manifests and land ban forms)**

| | |
|------------|-------------|
| J. Markiw | R. Meyer |
| R. Belcher | R. Pajk |
| C. Valore | M. Blake |
| J. Meyer | H. Lafferty |



ASW WIRE MILL
Heat Treating/Bells

Oil Spill Prevention & Control Procedures

POTENTIAL SOURCES

In the Bells Annealing basement, there are two potential sources of an oil discharge that all operators must be aware of:

Overflow

- Recirculation system pump failure
- Recirculation tank line or filter plugging
- System overfilling by operator

Leak

- Broken lines
- Improperly sealed fittings

SECONDARY CONTAINMENT, NOTIFICATION & RESPONSE EQUIPMENT

In order to prevent an overflow from entering the water system, ASW is installing a secondary containment and alarm system to notify operators and contain the overflowing oil until corrective action can be taken. The system is composed of the following:

1. Overflow Tanks

Two overflow tanks, with approximately 600 gallon capacity each, will be installed, one each in the north and south lanes of the basement. Each tank will service two recirculating systems (quadrants). An overflow port and gravity flow line will be installed on each recirculating tank. In the event that the oil level in any of these tanks exceeds normal operating height, the oil will run through the gravity flow line into the overflow tank instead of onto the floor.

2. High Level Alarm System

High Level Alarms will be set in each recirculating tank at the overflow level. In the event of high level oil, an audible alarm will sound and an indicator light (at one central location) will illuminate, signaling to the operator the exact location of the overflowing recirculating tank.

3. Two Spill Control Kits will be located in the basement, one at the east end of the North Lane and one at the west end of the South Lane. Each kit will contain the following items:

- A drum or pallet of Floor-Dry (equivalent of 8 40 lb. bags)
- One Shovel

- One Push Broom
- Two 46" Sorbent Booms
- Two pair Rubber Overshoes/Boots
- Two Pair Gloves

INSPECTION & CORRECTIVE ACTION

On a routine basis (beginning of each shift) the Bells Annealing Operator will conduct a Tour/Inspection of the entire basement (both north & south lanes) for oil spill prevention, control and corrective action. Procedures are as follows:

| <u>INSPECTION ITEM</u> | <u>CORRECTIVE ACTION</u> |
|-----------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1. Atmosphere of basement: safe levels of oxygen, nitrogen & combustible gases (use a portable gas meter) | If levels are measured as unsafe, immediately evacuate basement, notify all employees in area, Bells supervisor & Maint. Dept. (Following action to be determined upon investigation) |
| 2. Integrity of recirculating tank, pump, motor, & associated piping (holes, cracks, leaks drips & general operation) | Note any such problems and contact Maint. to repair any breaks or malfunctions |
| 3. Level of oil in the recirculating tank | Note level as 1/4, 1/2, 3/4 or Full and adjust recirculation flow rate as needed for proper operation |
| 4. Level of oil in overflow tank | If the level equals or exceeds 25% of tank capacity, pump this oil into used oil holding drums for removal |
| 5. Used Oil Holding Drums | When these drums are full, remove them from basement, transport them to an oil collection center (Rod Mill oil skimmer tank) empty the drums into the collection vessel & return the drums to the Bells basement |
| 6. Oil & Water on the Floor | Oils must be cleaned up with floor-dry & residue shoveled into refuse containers. Water with <u>no oil</u> can be squeegeed or brushed to sewer drain. Floors must be maintained clean & dry |
| 7. Housekeeping | General rubbish & articles must be collected and placed in refuse containers. Operators must periodically remove containers, empty rubbish, & replace containers |

8. Spill Control Kits (availability & condition of all items)

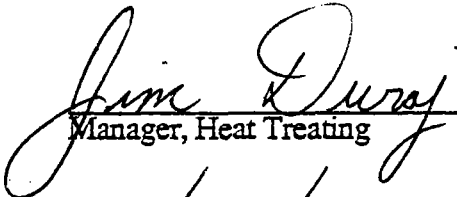
Procure & replace Floor-Dry as necessary. If other items are missing or damaged, contact your supervisor for replacement

WEEKEND CONTROL STRATEGY

In order to prevent undetected leaks or system failure on weekends, the following strategies will be undertaken:

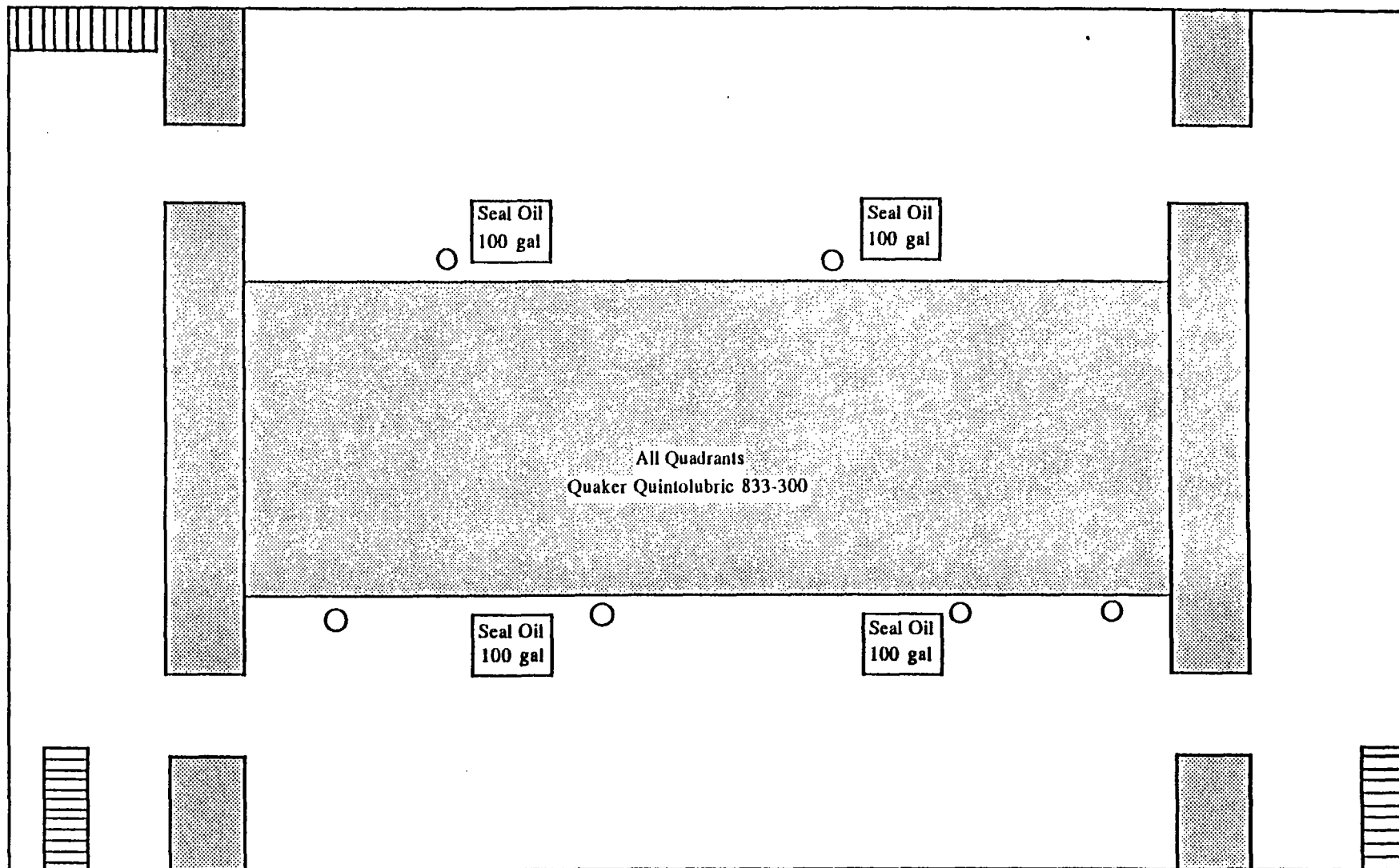
1. Operators will drain all oil from the Base Seals
2. Operators will pump all oil from the Recirculating Tanks up into the Holding Reservoirs (Floor Level)
3. Operators will securely close the Holding Reservoir Outlet Valves (X).

Approved for Implementation

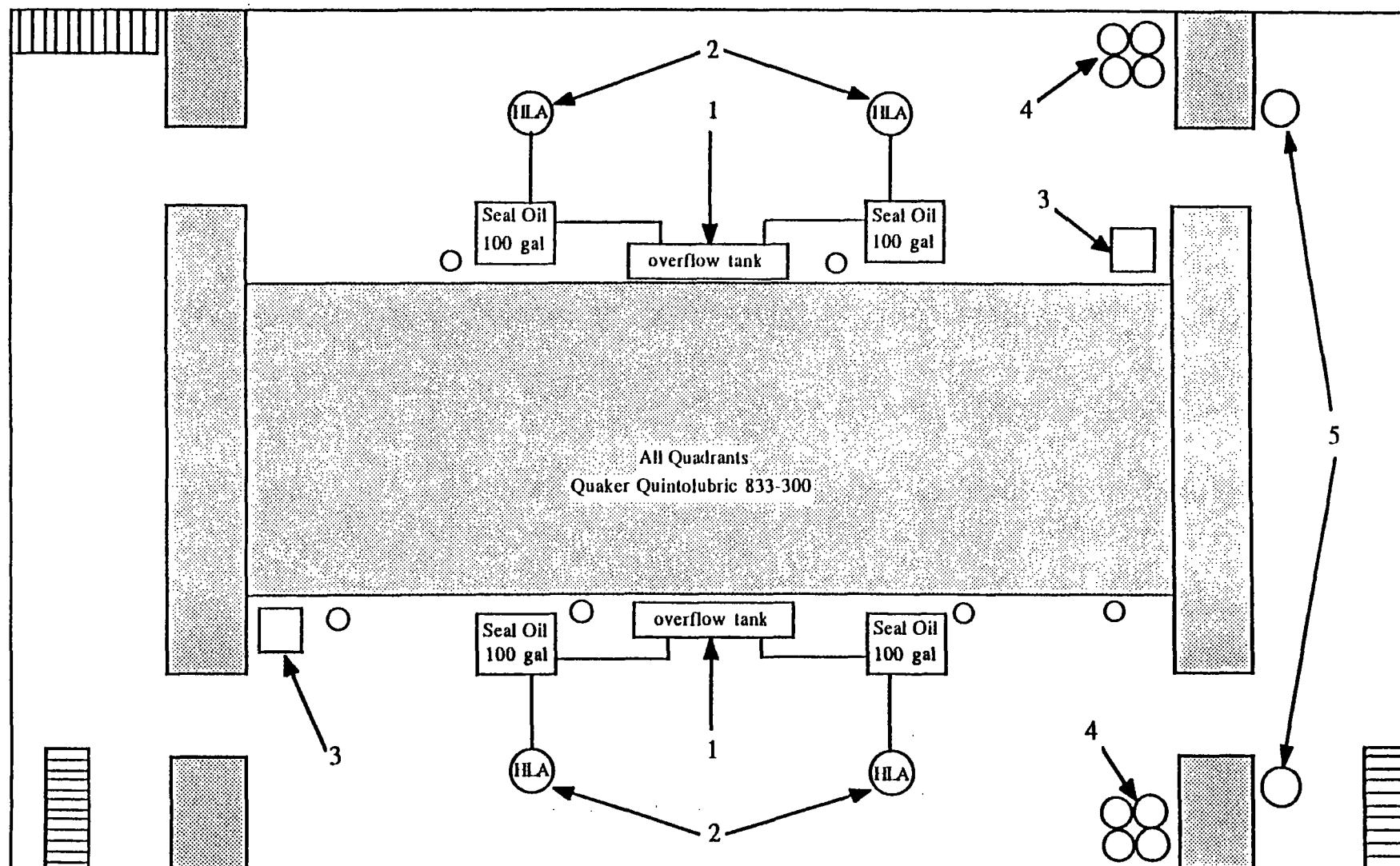

Manager, Heat Treating
4/30/92
Date

EXISTIN

WIRE MILL
HEAT TREATING/BELLS BASEMENT



WIRE MILL HEAT TREATING/BELLS BASEMENT

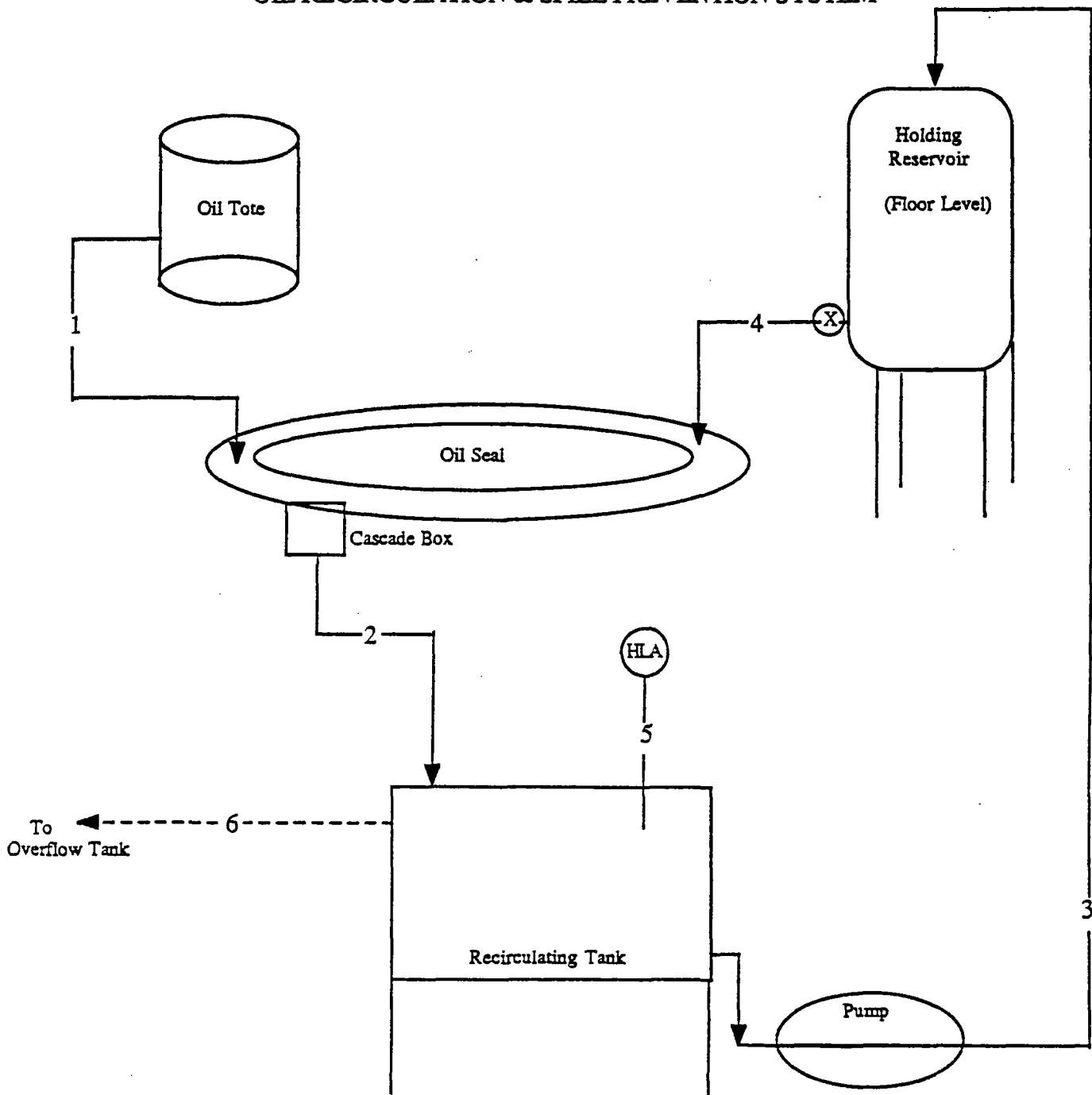


DRAFT CONTROL STRATEGIES

1. Install & connect overflow tanks capable of containing volume for at least one complete recirculating system
2. Install High Level Alarms (HLA) in each recirculating tank to indicate if/when any system begins to overflow
3. Equip & Maintain Spill Control Kits
4. Equip & Maintain Used Oil Holding Drums (Containers)
5. Locate & Maintain general rubbish Refuse Containers

WIRE MILL
HEAT TREATING/BELLS

OIL RECIRCULATION & SPILL PREVENTION SYSTEM



1. Operator fills Oil Seal with oil directly from the supplier's portable Oil Tote
2. Oil cascades (through Cascade Box) down into the Recirculating Tank at basement level
3. Oil is recirculated via pump up into an oil Holding Reservoir at floor level
4. With the valve (X) open, oil gravity feeds into the oil seal and the cascade/recirculation process continues
5. In the event of a system failure, the High Level Alarm (HLA) will sound (horn) and a location indicator light will illuminate, alerting Bells Operator to the location of malfunction and potential oil overflow
6. Overflowing oil will flow through the overflow line into the overflow tank